WHAT IS CLAIMED IS:

1. A rate matching puncturing method in a mobile communication system, comprising:

(a) performing a channel coding for bits of a transport channel and outputting one or more channel-coded sequences;

(b) constructing a first interleaving pattern based on a unit of a symbol for each of the channel-coded sequences;

(c) constructing virtual interleaving patterns for said each of the channel-coded sequences by considering a mapping rule with a corresponding first interleaving pattern;

(d) calculating different bit shifting values in each column of the constructed virtual interleaving patterns and determining a bit position to be punctured; and

(e) puncturing bits in each first interleaving pattern constructed in (c), based upon (d).

2. The method of claim 1, wherein in (d), the determining a bit position to be punctured is excluded for a systematic sequence when a turbo coding is performed.

3. The method of claim 2, wherein in (d), the puncturing by a uniform bit number is executed for a first parity sequence and a second parity sequence when the turbo coding is performed.

4. The method of claim 2, wherein a prescribed puncturing bit number for the turbo coding is P, wherein in (d), the determining a bit position to be punctured is performed for $\lfloor P/2 \rfloor$ number of bits on a first parity sequence and the puncturing is executed for $\lceil P/2 \rceil$ number of bits on a second parity sequence generated by turbo-interleaving the first parity sequence, and wherein $\lceil P/2 \rceil$ is a minimum integer value greater than P/2 and [P/2] is a maximum integer less than said P/2.

5. The method of claim 2, wherein a prescribed puncturing bit number for the turbo coding P, and wherein in (d), the determining a bit position to be punctured is performed for $\lceil P/2 \rceil$ number of bits on a first parity sequence and the puncturing is executed for $\lfloor P/2 \rfloor$ number of bits on a second parity sequence generated by turbo-interleaving the first parity sequence, and wherein $\lceil P/2 \rceil$ is a minimum integer value greater than P/2 and [P/2] is a maximum integer less than said P/2.

6. The method of claim 2, wherein a prescribed puncturing bit number for the turbo coding P, wherein in (d), a parameter is decided so that $\lceil P/2 \rceil$ number of bits are each punctured on a first parity sequence and on a second parity sequence that is generated by turbo-interleaving the first parity sequence, and wherein a rate matching pattern determination excludes a final puncturing in a column unit of a first interleaver for one parity sequence out of two parity sequences, said puncturing being for the first parity sequence and the second parity sequence among sequences output after the turbo coding.

7. The method of claim 1, wherein (d) comprises:

computing initial error offset values to decide a bit position to be initially punctured in each virtually interleaved sequence;

calculating a puncturing distance for said each virtually interleaved sequence provided for deciding puncturing bit positions based upon the initially punctured bit position; and

applying the computed initial error offset values and the calculated puncturing distance to compute the different bit shifting values in said each column.

8. The method of claim 7, wherein said puncturing distance is a maximum integer value that is not over a size of a corresponding virtually interleaved sequence divided by a bit number to be punctured on said corresponding virtually interleaved sequence.

9. A rate matching method for uplink in a mobile communication system, comprising:

executing in a frame unit a turbo coding for bits of a transport channel, and branching off the bits into a systematic sequence, a first parity sequence and a second parity sequence;

constructing a first interleaving pattern based on a unit of a symbol for the branched-off sequences;

constructing a virtual interleaving pattern for each parity sequence turbo-coded by considering a mapping rule with a corresponding first interleaving pattern;

calculating different bit shifting values in each column of each virtual interleaving pattern;

deciding a bit position to be punctured in each constructed virtual interleaving pattern by using the calculated bit shifting values; and

puncturing bits according to the decided bit position to be punctured.

10. The method of claim 9, wherein in said puncturing step, the puncturing is performed for a number of bits equivalent to a maximum integer value not over P/2 for the first parity sequence, and the puncturing is performed for a number of bits equivalent to a minimum integer value larger than P/2 for the second parity sequence, wherein a prescribed puncturing bit number for a turbo coding is P.

11. The method of claim 9, wherein in said puncturing step, the puncturing is performed for a number of bits equivalent to a minimum integer value larger than P/2 for the first parity sequence, and the puncturing is performed for a number of bits equivalent to a maximum integer value not over P/2 for the second parity sequence, wherein a prescribed puncturing bit number for turbo coding is P.

12. The method of claim 9, wherein the calculating step comprises :

computing different initial error offset values to decide a bit position to be initially punctured in virtually interleaved first and second parity sequences;

calculating a puncturing distance according to each virtually interleaved first and second parity sequences provided for deciding puncturing bit positions based upon the initial puncturing bit position; and

applying the computed initial error offset values and the calculated puncturing distance to compute the different bit shifting values.

13. The method of claim 12, wherein said puncturing distance is a maximum integer value that is not over a size of a corresponding virtually interleaved sequence divided by a bit number to be punctured on said corresponding virtually interleaved sequence.

14. The method of claim 12, wherein said puncturing distance has different code values according to a prescribed puncturing rate for the virtually interleaved first and second parity sequences.

15. The method of claim 14, wherein said puncturing distance is a positive value when said prescribed puncturing rate is over 50%, and said puncturing distance is a negative value otherwise.

16. The method of claim 14, wherein shifting parameters for each column are calculated using the number of non-punctured bits for each column when said pre-decided puncturing rate for each parity sequence is over 50%.

17. A sequence repetition method for an uplink rate matching, in a mobile communication system, comprising:

performing in a frame unit a channel coding for bits of a transport channel;

constructing a first interleaving pattern based on a unit of a symbol;

calculating a mean repetition distance according to a prescribed bit repetition rate using a mapping rule with the constructed first interleaving pattern;

computing different bit shifting values based on respective columns in the constructed first interleaving pattern by using the mean repetition distance; and

deciding a repetition bit position in the constructed first interleaving pattern by using a corresponding bit shifting value.

18. The method of claim 17, wherein values of 0 and 1 are alternately used as the bit shifting values per each column to decide the repetition bit position, when said calculated mean repetition distance is not over 2 and a bit repetition rate exceeds 50%.

19. The method of claim 17, wherein when a bit repetition rate exceeds 100%, the bit shifting values are calculated by performing a one time repetition of an original input sequence, re-computing the mean repetition distance for each sequence provided for deciding a twice repeated bit position from a modulo operation result for the remaining bit number to be repeated on a length of the original input sequence, and re-calculating the mutually different bit shifting values of each column in the constructed first interleaving pattern by using the re-computed mean repetition distance.

20. The method of claim 19, wherein said bit shifting values are computed again by deciding the mean repetition distance as 1, when the bit repetition rate is twice the length of the original input sequence.